GRITSAY, M.K.; SHEVCHENKO, A.K.

Results of malaria control during the 40 years of Soviet rule in the Ukraine. Med.paraz.i paraz.bol. 37 no.5:523-527 S-O '59.
(MIRA 13:4)

1. Iz Ministerstva zdravookhraneniya USSR i Khar'kovskoy oblastnoy sanitarno-epidemiologicheskoy stantsii.
(MALARIA prev. & control)

GRITSAY, M. K. and SHEVCHENKO, A. K.

"Organization of Measures to Control Vermin on Large Construction Projects in the Ukrainian SSR."

Tenth Conference on Parsitological Problems and Diseases with Natural Reservoirs, 22-29 October 1959, Vol. II, Publishing House of Academy of Sciences, USSR, Moscow-Leningrad, 1959.

Ministry of Health UkSSR and Kharkov Oblast Sanitary-Epidemiological Station

GRITSAY, M.K.; LAVRENKO, Ye.M.; KOLMOGOROVA, V.V.; YEZHKOV, M.A.; BERKOVICH, [redacted]; LEKOVA, T.Kh.

Sandfly fever and its control in the areas of Odessa Province, formerly Izmail' Province. Med.paraz. i paraz.bol. 26 no.1:71-73 Ja-F '57. (MLRA 10:6)

1. Iz Ukrainskogo instituta malyarii i meditsinskoy parazitologii imeni prof. V.Ya.Rubashkina (dir. instituta I.A.Demchenko) i parazitologicheskikh otdeleniy Izmail'skoy gorodskoy, Reniyskoy i Bolgradskoy rayonnykh sanitarno-epidemiologicheskikh stantsiy.
(PAPPATACI FEVER, prev. and control in Russia)

GRITSAY, M.K.

YEVLAKHOVA, V.F.; GRITSAY, M.K.; LAVRENKO, Ye.M.; BERKOVICH, B.I.

Effectiveness of DDT and benzene hexachloride in control of mosquito fever in Izmail Province. Med. paraz. i paraz. bol. no.4:334-338 O-D '54. (MLRA 8:2)

1. Iz Ukrainskogo nauchno-issledovatel'skogo instituta malyarii i meditsinskoy parazitologii (dir. I.A.Izmail'skiy oblastnoy protivomalyariynoy stantsii (zav. I.N.Kitsis)

(FEVER,
mosquito fever, control in Russia with DDT & benzene hexachloride)
(MOSQUITOES,
mosquito fever, control in Russia with DDT & benzene hexachloride)
(DDT,
mosquito fever control in Russia)
(BENZENE HEXACHLORIDE,
mosquito fever control in Russia)

ANDROSOV, B.I., kand.tekhn.nauk; BEGAGOYEN, T.A., inzh.; BERKOV, K.I., inzh.; BLINOV, I.S., kand.tekhn.nauk; BROYTMAN, A.A., kand.tekhn. nauk; GRITSAY, L.L., kand.tekhn.nauk; ZAVISHA, V.V., kand.tekhn. nauk; KUNITSKIY, A.A., inzh.; LESHCHINSKIY, V.N., inzh.; PASECHNIK, I.V., kand.tekhn.nauk; DUBCHAK, V.Kh., inzh., retsenzent; MATOV, I.T., inzh., retsenzent; TUMM, I.D., inzh., retsenzent

[Manual for ship mechanics] Spravochnik sudovogo mekhanika. Moskva, Transport, 1965. 832 p. (MIRA 18:12)

ACC NR: AP6033210 SOURCE CODE: UR/0229/66/000/009/0021/0023

AUTHOR: Gritsay, L. L.; Manuylov, V. P.

ORG: none

TITLE: Selecting optimum characteristics of marine steam turbine plant condensers

SOURCE: Sudostroyeniye, no. 9, 1966, 21-23

TOPIC TAGS: steam turbine, turbine cooling, marine engine, STEAM POWER PLANT

ABSTRACT: The selection of the optimum characteristics for marine steam-turbine power-plant condensers is analyzed from technical and economic view points. Since a great number of factors influences the operating efficiency of condensers, some of these factors are considered as given. Empirical formulas are given for the optimum water-circulation velocity in the condenser tubes, the cooling-multiplicity factor, and the specific steam load. The optimum water-circulation velocity is given as 1.4 to 1.6 m/sec, and the tendency to increase it to over 2 m/sec in modern steam-turbine power plants is not considered to be justified. In Soviet marine steam-turbine plants the designed cooling-multiplicity factor of 105--110 kg/kg practically coincides with its optimum of about 100 kg/kg, but the condenser's specific steam loading of 32 kg/m^2 hr is considered to be excessive. Orig. art. has: 2 figures and 4 formulas.

SUB CODE: 13/ SUBM DATE: none/ ORIG REF: 003

Card 1/1 UDC: 621.125

GRITSAY, Leonid Leonidovich,; MELEYEV, A.S., red.; LAVRENOVA, N.B., tekhn. red.

[Operation of condensing equipment on ships] Ekspluatatsiia sudovykh kondensatsionnykh ustanovok. Moskva, Izd-vo "Morskoi transport," 1958. 222 p. (MIRA 11:11)

(Condensers(Steam))

L.

BELOZEROV, K.; GRITSAY, L. inzhener.

Operating the steam power plant in the "Shakhtersk". Mor. flot. 16 no.7:12-14 My '56. (MLRA 9:7)

1.Starshiy mekhanik parokhoda "Shakhtersk" (for Belozarov).2.OVMU (for Gritsay).
(Boilers, Marine) (Shakhtersk (Ship))

GRITSAY, L., inzhener.

Experience in using a Johansson-Götaverken system turbo-reciprocating engine. Mor.flot 7 no.1:26-28 Ja '47. (MLRA 9:5)

1. Odesskiy institut inzhenerov Morskogo flota.
(Steam turbines) (Marine engines)

parts of troughs moving from the west and southwest and in the warm sectors of cyclones. About 84% of the cases of formation of low stratiform clouds occur in all three groups of these synoptic processes. Less frequently, low stratiform clouds are formed in washed-out areas of high pressure or in filling regions of low pressure with transition of wind to marine directions. A more detailed investigation revealed that in an analysis of the conditions for formation and propagation of low stratiform clouds it is necessary to take into account not only aerosynoptic factors and the values of the meteorological elements at the earth's surface, but also thermodynamic and other characteristics of the boundary layer in which these clouds form. A detailed study of this problem ends with the following conclusions: 1) a statistical analysis confirms the existence of a quite stable relationship between low stratiform clouds and definite values of the thermodynamic gradient (Γ), the vertical temperature gradient (γ), relative humidity, heights of blocking layers and condensation level, considered together; 2) it can be assumed with a reliability of about 80% that continuous low stratiform clouds are formed and exist at the following values of complex criteria in the lower 200-m layer of the atmosphere: $1 \leqslant \Gamma \leqslant 2$; $0.25 \leqslant \gamma \leqslant 0.75$; 3) the reliability of description of low stratiform clouds can exceed 90% if relative air humidity, height of the blocking layer and condensation level are also taken into account. This is correct under the condition that Γ and γ conform to the values cited above.

meteorological data (hourly observations at aviation meteorology stations), aerological data (pressure pattern charts, high-level sounding data) and hydrological data (information on water temperature in the coastal waters and in the open sea). A total of 175,248 hourly observations for six aviation meteorology stations for the period 1955-1960 were analyzed. The distribution of temperature and air humidity at the earth's surface and aloft and the determination of the thermodynamic conditions observed when low stratiform clouds were present were ascertained from data from 491 aircraft ascents and 88 cases of radiosonde launchings at Odessa. In addition, a total of 236 cases of radiosonde launchings in the absence of continuous low stratiform clouds were analyzed, but for the case of transport of air masses from the sea onto the continent. Data are given in the form of graphs for the frequency of fogs and low clouds for different wind directions in the Odessa area. A preliminary analysis of the data made it possible to establish that low stratiform clouds in the southwestern part of the Ukraine are observed when there are winds blowing from the northeast to the southwest at the time of advection of heat and moisture within the boundary layer of the atmosphere and when there is an inversion or isothermal conditions in the lower kilometer layer. In the considered cases the water temperature in the open sea was greater than the air temperature. Conditions favorable for the formation of low stratiform clouds arise on the western periphery of anticyclones and ridges, in the leading

L 40206-65 EWT(1)/FCC GW
ACCESSION NR: AR5008604 S/0169/65/000/001/B020/B020

12
B

SOURCE: Ref. zh. Geofizika, Abs. 1B143

AUTHOR: Grigay, G. G.

TITLE: Conditions for the formation of low stratiform clouds in the southwestern Ukraine

CITED SOURCE: Tr. Leningr. gidrometeorol. in-ta, vyp. 19, 1963, 208-227

TOPIC TAGS: cloud formation, low cloud, stratiform cloud, fog, inversion, atmospheric boundary layer, anticyclone

TRANSLATION: The Russian term "vynosnaya" cloud cover used in the original text refers to stratiform clouds at heights up to 600 m, appearing in the coastal regions and caused by the intrusion of marine air masses onto the continent. It exerts an appreciable influence on the operations of aircraft in coastal regions because it closes in airports. The article gives the results of a statistical analysis of data on low clouds in the southwestern part of the Ukraine and discusses the conditions for the formation of low stratiform clouds in this region. The study was made on the basis of synoptic data (basic and airport weather charts),

Card 1/4

NOVIKOV, I.T.; NEPOROZHNIY, P.S.; GANICHEV, I.A.; LAVRENENKO, K.D.; FINOGENOV, Ya.I.; ALEKSANDROV, D.Ya.; SERDYUKOV, N.P.; KUDRYAVTSEV, L.N.; PETROV, A.N.; BANNIK, V.P.; VOLKOV, I.M.; MEL'NIKOV, B.V.; STAROSTIN, I.A.; BUBNOVSKIY, G.A.; SUVORIN, F.Ya.; GRITSAY, B.I.; SKUPKOV, A.A.; BAMSHTEYN, Ye.B.; TURCHIN, N.Ya.

IUrii Nikolaevich Pongil'skii; obituary. Energ. stroi. no.27:99 '62. (MIRA 15:9)
(Pongil'skii, IUrii Nikolaevich, 1925-1962)

GRITSAY, G.A., inzh.

Organization of preventive inspection of electric locomotives at the Chusovoy Depot. Elek. i tepl. tiaga 2 no.5:20-23 '58. (MIRA 12:4)

1. Nachal'nik tekhnicheskogo otdela lokomotivnogo depo Chusovskaya. (Chusovoy--Railroads--Repair shops) (Electric locomotives)

GRITSAY, F.A.; DEREVSHCHIKOV, N.A.

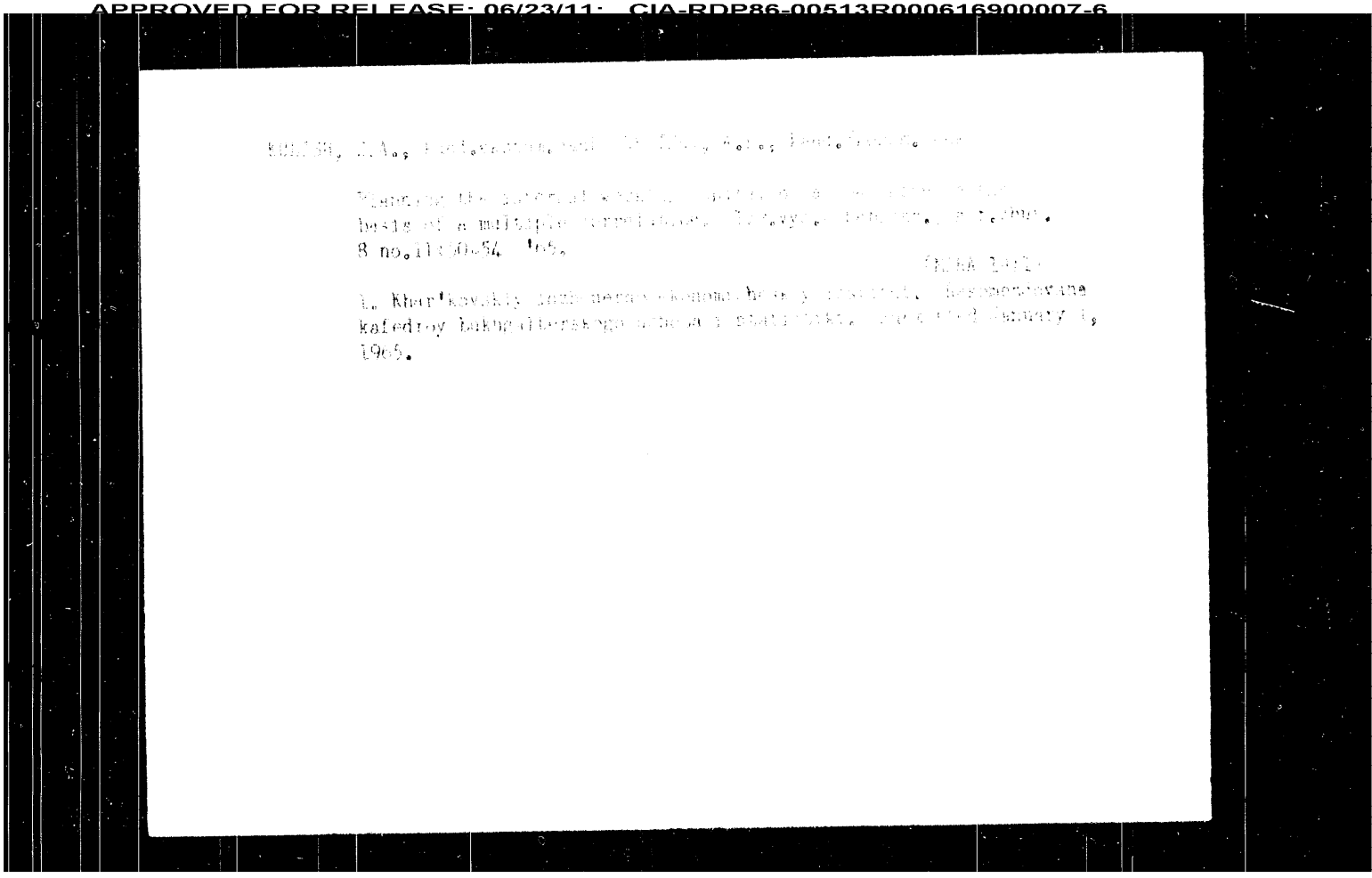
Semiautomatic device for packing lubricants into small containers. Transp. i khran. nefti i nefteprod. no.5:30-32 '65.
(MIRA 18:10)

1. Moskovskoye upravleniye Glavnogo upravleniya po transportu i snabzheniyu neft'yu i nefteproduktami pri Sovete ministrov RSFSR.

GRITSAY, E.I., inzh.

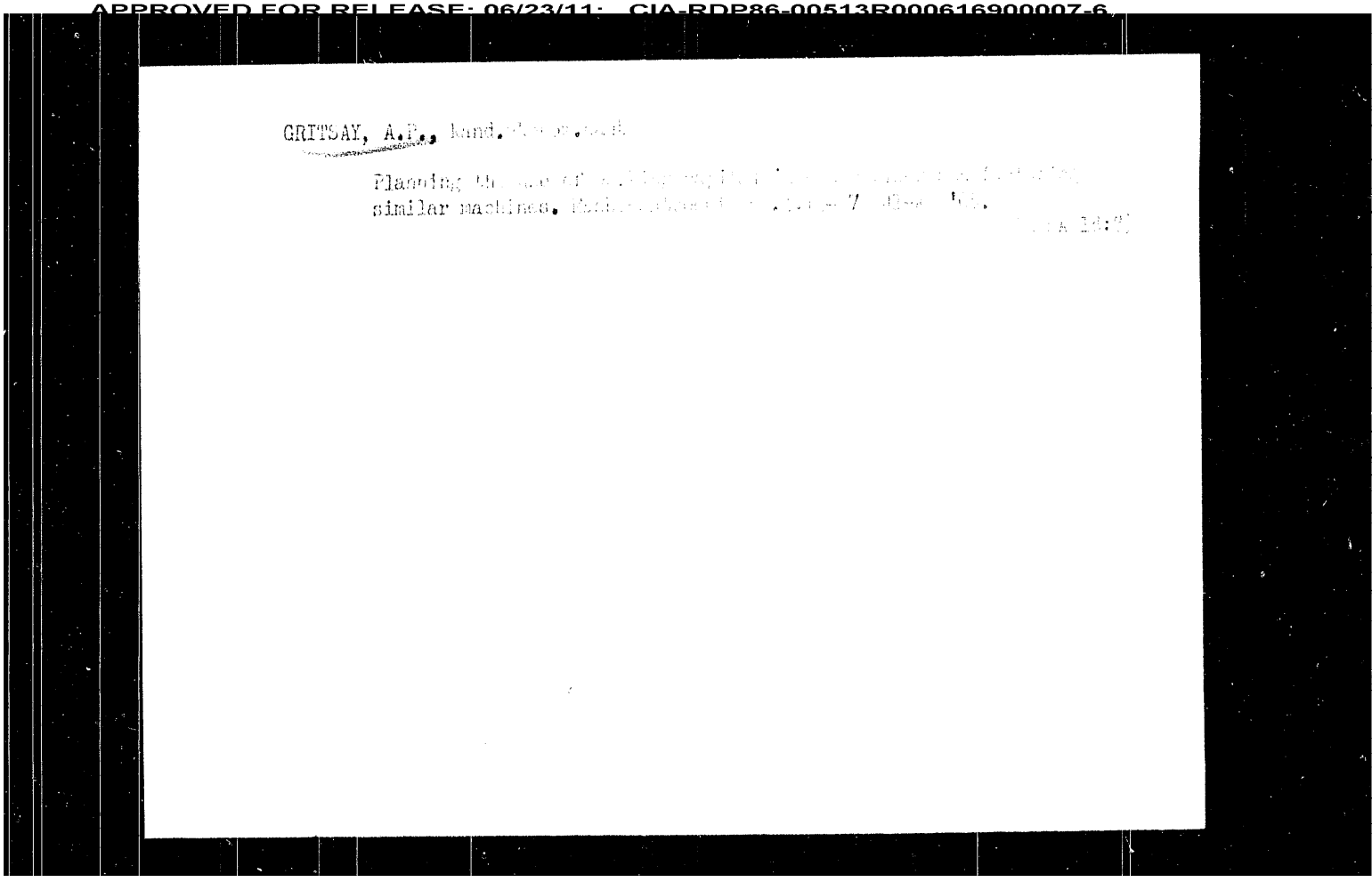
Increase in labor expenditures in construction sites in Siberia. Energ. stroi. no.38:29-31 '64. (MIRA 17:10)

1. Trest "Sibenergostroy."



GRITSAY, A.P., kand. ekonom. nauk, dotsent

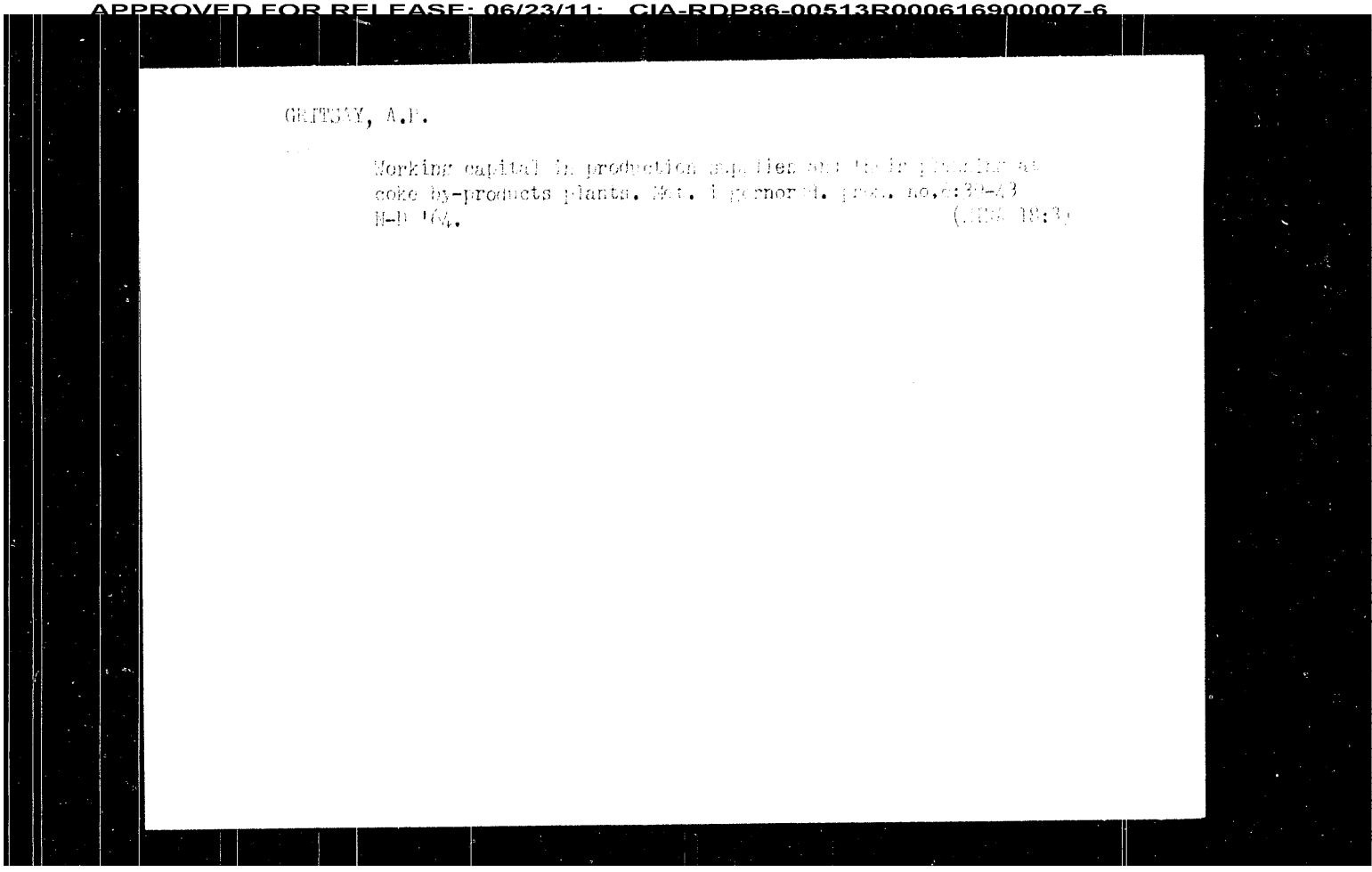
Establishing norms for the working capital in unfinished production in mass and lot-production machinery plants. Izv. vys. ucheb. zav.; mashinostr. no.9:184-188 '65. (MIRA 18:11)



GRITSAY, A.F., kand.

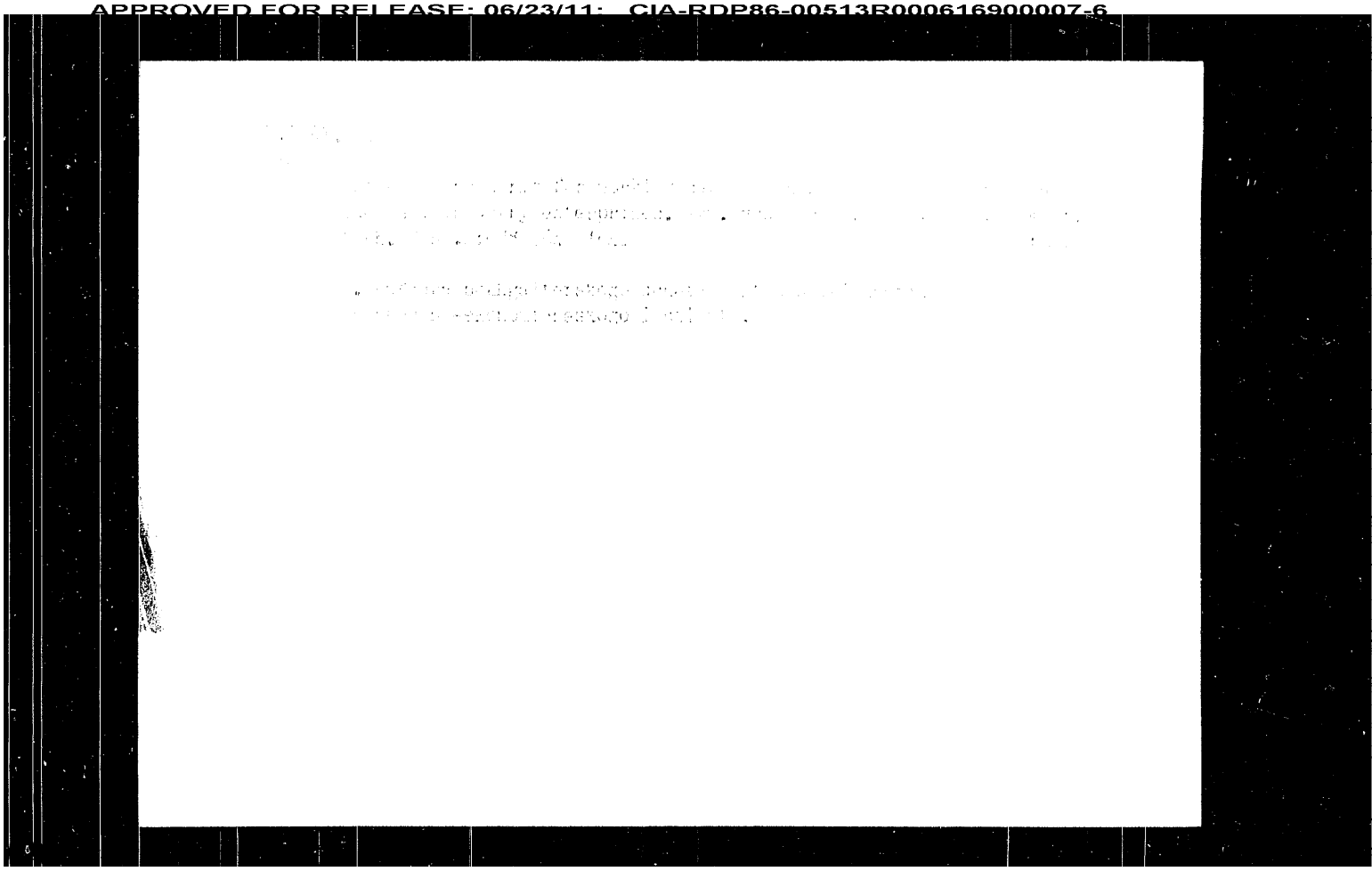
Planning [illegible]
similar machines. [illegible] 7 [illegible].

[illegible]A 28:2



GRITSAY, A.P.

Working capital in production supplies and its planning at coke by-products plants. Mat. i gornor. prom. no.6:39-43 N-D '64. (MIRA 18:3)



GRITSAY, A. P.

Consolidated planning of the working capital in metallurgical plants. Izv. vys. ucheb. zav.; chern. met, 7 no. 4:186-190 '64. (MIRA 17:5)

GRITSAY, A.P.

Establishing norms for working capital by the output of finished articles. Mashinostroitel' no. 5:37 My '64. (MIRA 17:7)

GRITSAY, A.P., kand.ekonomicheskikh nauk

Establishing norms for working capital in unfinished production in separate machinery plants. Izv.vys.ucheb.zav.;mashinostr.no.1:175-181 '63. (MIRA 16:5)

1. Khar'kovskiy inzhenerno-ekonomicheskiy institut.
(Machinery industry--Management)

GRITSAY, Aleksandr Petrovich; IVANOV, Nil Ivanovich; CHIBISOV, Vasiliy Dmitriyevich; NOVIKOVA, I.Ye., red.; GARINA, T.D., tekhn. red.

[Working capital of socialist industrial enterprises] Oborotnye sredstva sotsialisticheskikh promyshlennykh predpriiatii. Moskva, Vysshaia shkola, 1963. 84 p. (MIRA 16:10)
(Capital)

VITEBSKIY, Mikhail Naumovich; FISHKINA, F.I.; GRITSAY, A.P.; SHTETS, K.A., dots., otv. red.; ALYAB'YEV, N.Z., red.; TROFIMENKO, A.S., tekhn. red.

[The finance of socialist industry]Finansy sotsialisticheskoi promyshlennosti. Khar'kov, Izd-vo Khar'kovskogo univ., 1962. 274 p. (MIRA 16:3)

(Finance)

GRITSAY, A.P., inzh.

Improving working capital planning in coal mining. Ugol' Ukr. no.6:34-36 Je '61. (MIRA 14:7)
(Mining industry and finance)

GRITSAY, A.P., aspirant

Improving the planning of working capital in the machinery industry. Izv.vys.ucheb.zav.; mashinostr. no.5:165-171 '60. (MIRA 13:7)

1. Khar'kovskiy inzhenerno-ekonomicheskiy institut.
(Machinery industry)

USSR / Diseases of Farm Animals. General Problems.

Abs Jour : Ref Zhur - Biol., No 22, 1958, No 101311

Author : Turbina, T. V.; Gritsay, [illegible]; Karapetova, A. B.

Inst : Turkmen Agricultural Institute

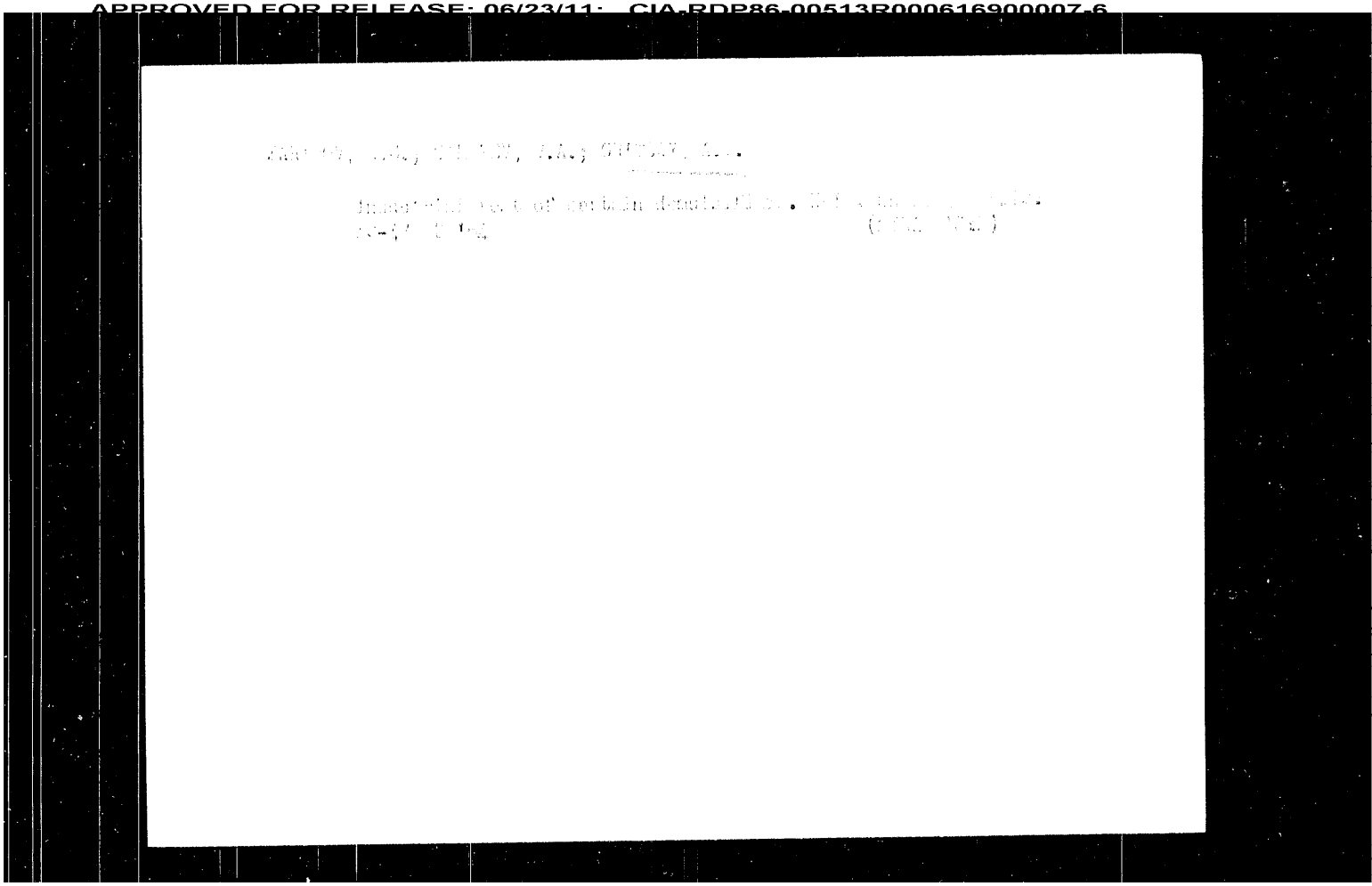
Title : Comparative Evaluation of Medicinal Dusting Agents upon Healing of Wounds in Farm Animals.

Orig Pub : Tr. Turkm. s.-kh. in-ta, 1957, 9, 291-300

Abstract : Observations were carried out on sheep, [illegible], dogs, pigs, and horses. It was established that hexachlorocyclohexane dusting [illegible] development of pus-forming microbes in w[illegible]. Thus, hydration phases of wound processes are shortened, and development of firm, healthy [illegible] and epithelial tissues becomes accelerated. When wounds are dusted with hexachlorocyclohexane and DDT, their becoming infested by fly larvae is prevented. These dustings do not produce any toxic effects upon the animals' organisms.

Card 1/1

4



GRITSANCHUK, I.N.

Province conference of medical personnel. Med. sestra 19 no.9:42-43 S '60. (MIRA 13:9)

(OMSK PROVINCE--MEDICAL PERSONNEL)

BLEYKHMAN, Isaak Samoylovich, kand.tekhn.nauk; GRITSANOV, A.Ye., red.; ZIMA, Ye.G., tekhn. red.

[Radio electronics in the past and present] Radioelektronika nastoiashchego i budushchego. Minsk, 1962. 31 p. (Obshchestvo po rasprostraneniiu politicheskikh i nauchnykh znanii Belorusskoi SSR, no.25) (MIRA 16:2)
(Radio) (Electronics)

GRITSANENKO, O.F.

Ways to improve the assortment of the manufactured [illegible].
Kozh.-obuv. prom. 6 no.12 [illegible] D '64 (MIRA [illegible])

GRITSAN, Nikolay

New developments. Grazhd.av. 18 no.10:13-14 O '61. (MIRA 15:5)
(Aeronautics--Study and teaching)

GRITSAN, N., mayor

Technical guard for the airplane. Starsh.-serzh. no.7:10 Jl '61.
(MIRA 14:9)
(Airplanes, Military--Maintenance and repair)

GRITSAN, D.N.; SHATROVSKIY, G.I.

Cell for the electrothermographic investigation of metal electrodeposition. Zhur.fiz.khim. 39 no.1:[illegible] '65.

1. Nauchno-issledovatel'skiy institut khimii pri Khar'kovskom gosudarstvennom universitete imeni A.M.Gor'kogo.

GALENKO, N.V.; CHITIAH, D.N.; CHATKOWSKIY, G.L.

Alteration of the measuring range of a self-recording filter potentiometer. Zav. lab. 31 no.8:1027-1028 '65. (MIRA 18:9)

1. Moskovskiy pedagogicheskiy universitet imeni Gor'kogo.

GRITSAN, D.N. [Hrytsan, D.M.]; SHATROVSKIY, G.L. [Shatrovs'kyi, H.L.]

Electrothermographic study of cadmium electrodeposition.
Dop. AN URSR no.11:1497-1503 '64. (MIRA 18:1)

1. Institut khimii Khar'kovskogo universiteta. Predstavleno akademikom AN UkrSSR Yu.K. Delimarskim [Delimars'kyi, IU.K.].

L 23503-65

ACCESSION NR: AP5001590

the possibility of controlling the composition of the hydroxide mixture, the authors studied the kinetics of the electrodeposition of the hydroxide of each metal separately, the completeness of their deposition, and the conditions under which the poorly soluble compounds would not be deposited on the electrodes and would not passivate them. The experiments were conducted at 20 and 90C. Electrolysis was carried out in a glass vessel; the anode was a plate made of the test metal and the cathode was a plate of stainless steel or other metal. Aqueous solutions of various salts and acids were used as the electrolyte, the most suitable being diluted solutions of NaCl, KCl, or HCl. The HCl solutions made it possible to obtain very pure hydroxide mixtures that did not require washing. Orig. art. has: 1 table and 8 figures.

ASSOCIATION: Khar'kovskiy gosuniversitet im. A. M. Gor'kogo (Khar'kov state university)

SUBMITTED: 25Nov63 ENCL: 00 SUB CODE: MM,IC

NO REF SOV: 002 OTHER: 000

Card 2/2

L 23503-65 EWT(1)/EWP(e)/EWT(m)/EWP(k)/EED-2/EWP(b)/EWP(t) IJP(e) JD

ACCESSION NR: AP5001590 S/0226/64/000/006/0035/0042

AUTHOR: Grigoryan, D. N.; Serpukhova, L. N.; Zhirov, G. A.; Leykina, R. Sh.; Kruzina, N. G.; Buzaviev, A. T.; Yefremova, N. M.; Tyutina, V. K.; Shilova, S. P.

TITLE: Electrolytic method for obtaining powder for the manufacture of ferrites

SOURCE: Poroshkovaya metallurgiya, no. 6, 1964, 35-42

TOPIC TAGS: nickel zinc ferrite, electrodeposition, powder metallurgy, ferrite manufacture, hydroxide precipitation

ABSTRACT: The authors describe their electrolytic method for obtaining a mixture of iron, nickel, and zinc hydroxides with a prescribed composition. The method can also be used to obtain a mixture of hydroxides completely free of extraneous metal ions and therefore not requiring special washing. By subsequent heat treatment, a mixture of oxides of a given composition can be obtained from the hydroxide mixture for the manufacture of nickel-zinc ferrites. This electrolytic method of obtaining nickel-zinc ferrite powders is based on the joint anodic solution of iron, nickel, and zinc in the electrolytic cell and simultaneous precipitation of the ions as hydroxides by the hydroxyl ions generated at the cathode. To elicit

Card 1/2

GRITSAN, D. N.; SHUN, D. S.

Effect of wetting adsorption layers on the electrodeposition of metals. Izv. vys. ucheb. zav.; khim. i khim. tekh. 5 no.5: 775-781 '62. (MIRA 16:1)

1. Khar'kovskiy gosudarstvennyy universitet imeni A. M. Gor'kogo, kafedra fizicheskoy i kolloidnoy khimii.

(Electroplating) (Surface-active agents)

used for the purpose. It was found that high wetting and washing ability, high-surface activity, good solubility in water, chemical stability to electric currents and acids of the organic additives improve the structure of the electrodeposited metals. Particularly good lead deposits were obtained from lead acetate and nitrate solutions to which wetting agents ДБ (DB) and НБ (NB) (3 to 5 g/l) were added. There are 3 figures and 2 tables.

ASSOCIATION: Katedra fizicheskoy i kolloidnoy khimii
(Department of Physical and Colloidal Chemistry)
Dnepropetrovskiy khimiko- tekhnologicheskiy institut imeni F.E.Dzerzhinskogo
(Dnepropetrovsk Chemical Technological Institute imeni F.E.Dzerzhinskiy)

SUBMITTED: April 8, 1961

S/153/62/005/005/003/011
E021/E475

AUTHORS: Gritsan, D.N., Shun, D.S.

TITLE: The influence of hydrophilic adsorbed layers on the electrodeposition of metals

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Khimiya i khimicheskaya tekhnologiya, v.5, no.5, 1962, 775-781

TEXT: The influence of surface active substances on the electrodeposition of metals was investigated and the main requirements for obtaining compact deposits were formulated. The main experiments were carried out on the electrodeposition of lead from its nitrate and acetate salts; some additional experiments were also made with platinum and gold. Additions of various surface active agents were made to the electrolytes and the quality of resulting deposits noted. In addition, in order to confirm that an improvement in the quality of deposits was related to the formation of hydrophilic adsorbed layers of the surface-active substance on the surface of the metal, the influence of these substances on the wetability of some metals with water and aqueous solutions was investigated by measuring the angle of wetting. The method of displacement of air with water and vice versa was

Card 1/2

GRITSAN, D.N.; SHUN, D.S.; SERPUKHOVA, L.N.

Electrolytic deposition of dense lead precipitates from aqueous solutions of nitrate. Zhur.prikl.khim. 34 no.7:1528-1532 Jl '61. (MIRA 14:7)

1. Institut khimii Khar'kovskogo gosudarstvennogo universiteta.
(Lead—Plating) (Lead nitrate)

S/137/61/000/012/052/149
A006/A101

AUTHORS: Gritsan, D. N., Bulgakova, A. M.

TITLE: Joint electrolytic deposition of zinc and cadmium in powder form

PERIODICAL: Referativnyy zhurnal. Metallurgiya, no. 12, 1961, 34, abstract 12G242 ("Uch. zap. Khar'kovsk. un-t", 1961, 110, Tr. Khim. fak. i N.-i. in-ta khimii KhGU, v. 17, 93 - 96)

TEXT: During electrolytic deposition of Zn-Cd powders from sulfuric-acid salt solutions within the investigated current density range (3 - 7 amp/dm^2), the composition of the deposit changes depending on the electrolyte composition. The decrease observed in the Cd content of the powder was greater in Cd impoverished solutions. The anode composition does not affect the composition of the powder obtained by electrolysis in the case when the relative Cd content in the anode exceeds its relative concentration in the solution. Changes in the duration of electrolysis within 20 - 40 minutes do not affect the composition of deposits containing $\geqslant$ 80% Cd.

G. Svodtseva

[Abstracter's note: Complete translation]

Card 1/1

GRITSAN, D.N., Doc Chem Sci--(diss) "Study of the process of electroprecipitation of powdered metals." [illegible], 195[illegible]. 22 pp (Min of Higher Education USSR. Order of Lenin Chemico-Technological Inst im. D.I. Mendeleyev), 160 copies. List of author's works pp 21-22 (30 titles) (KL, 15-58, 112)

-16-

SOV/137-58-8-16763

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 8, p 76 (USSR)

AUTHOR: Gritsan, D.N.

TITLE: Electrolytic Deposition of Disperse (Powder) Metals [Elektrolitcheskoye osazhdeniye dispersnykh (poroshkoobraznykh) metallov]

PERIODICAL: Uch. zap. Khar'kovsk. un-t, 1957, Vol 95, Tr. Khim. fak. i N.-i. in-ta khimii KhGU, Nr 18, pp 93-116

ABSTRACT: A review of studies to determine the reasons for the formation of friable deposits and to find effective methods of combatting this. Bibliography: 99 references.

G.S.

1. Metal powders--Electrodeposition

Card 1/1

Cyclic Phenomena in the Electrodeposition of Metals. III. Cyclic Changes (cont.)

CP are not found in the presence of multiatomic alcohols (i.e., ethyleneglycol, glycerol, and mannitol - and in the dicarboxylic acids of the aliphatic series

N. P.

SOV/137-58-12-24296

Translation from: Referativnyy zhurnal Metallurgiya, 1958, Nr 12, p 52 (USSR)

AUTHORS: Gritsan, D N , Shun, D S

TITLE: Cyclic Phenomena in the Electrodeposition of Metals. II. Cyclic Changes in Cathode Polarization in the Plating of Cadmium in the Presence of Hydroxyl-containing Surface-active Substances (Periodicheskiye yavleniya pri elektroosazhdenii metallov. II. Periodicheskiye izmeneniya katodnoy polyarizatsii pri elektroosazhdenii kadmiya v prisutstvii gidroksilsoderzhashchikh poverkhnostnoaktivnykh veshchestv)

PERIODICAL: Uch zap Khar'kovsk un-t, 1957, Vol 82, Tr Khim fak i N.-i in-ta khimii, Vol 16, pp 77-86

ABSTRACT: A study is made of the influence of the aliphatic alcohols, the phenols, and the aliphatic carboxyl acids upon cyclic phenomena (CP) in Cd plating. It is found that as the hydrocarbon chain lengthens the influence of monoatomic alcohols on the periodicity rises. There is a rise in the cycle of fluctuations and a reduction in the minimum concentration of alcohol needed for CP to develop. In the presence of phenols the same CP are observed as in the presence of alcohols.

Card 1/2

GRITSAN, D.N.; BULGAKOVA, A.M.

Particle size determination of electrolytic cadmium powder by means of Figurovskii's sedimentation balance. Uch. zap. KHGU 82:69-75 '57. (MIRA 12:9)
(Cadmium) (Sedimentation analysis)

GRITSAN, D.N.; BULGAKOVA, A.M.

Influence of certain substances added to the electrolyte on the cathode "temperature effect" and polarization during the electrodeposition of powdered cadmium [with summary in English]. Zhur.fiz. khim. 31 no.9:1943-1948 S '57. (MIRA 11:1)

1.Khar'kovskiy gosudarstvennyy universitet im. A.M. Gor'kogo.
(Electroplating) (Cadmium) (Surface-active agents)

Gritsan, D.N

Distr: 4E4j

Periodic phenomena in the electrodeposition of metals. IV. Action of anions on the periodic phenomena in the electroprecipitation of cadmium in the presence of surface-active substances. D. N. Gritsan and D. S. Shun (A. M. Gor'kii State Univ., Khar'kov). *Ukrain. Khim. Zhur.* 23, 401-5 (1957)(in Russian); cf. *C.A.* 49, 15500h.—At c.d. 5.5 ma./sq. cm. there is a periodic change in the cathode potential of a 1.1*N* $CdSO_4$ soln. contg. 1.2% iso-AmOH. The following concns. (mmoles/l.) of halide will stop the periodic changes: Cl 8, Br 6, I 40. If 1.5*N* Na_2SO_4 is present the periodic changes occur at 5 ma./sq. cm. but not at 5.5. Such changes are observed for $Cd(NO_3)_2$ solns., but not for solns. of Cd acetate or halide. It is proposed that the firmly adsorbed anions displace the alc. and stop its periodic adsorption and desorption. John Howe Scott

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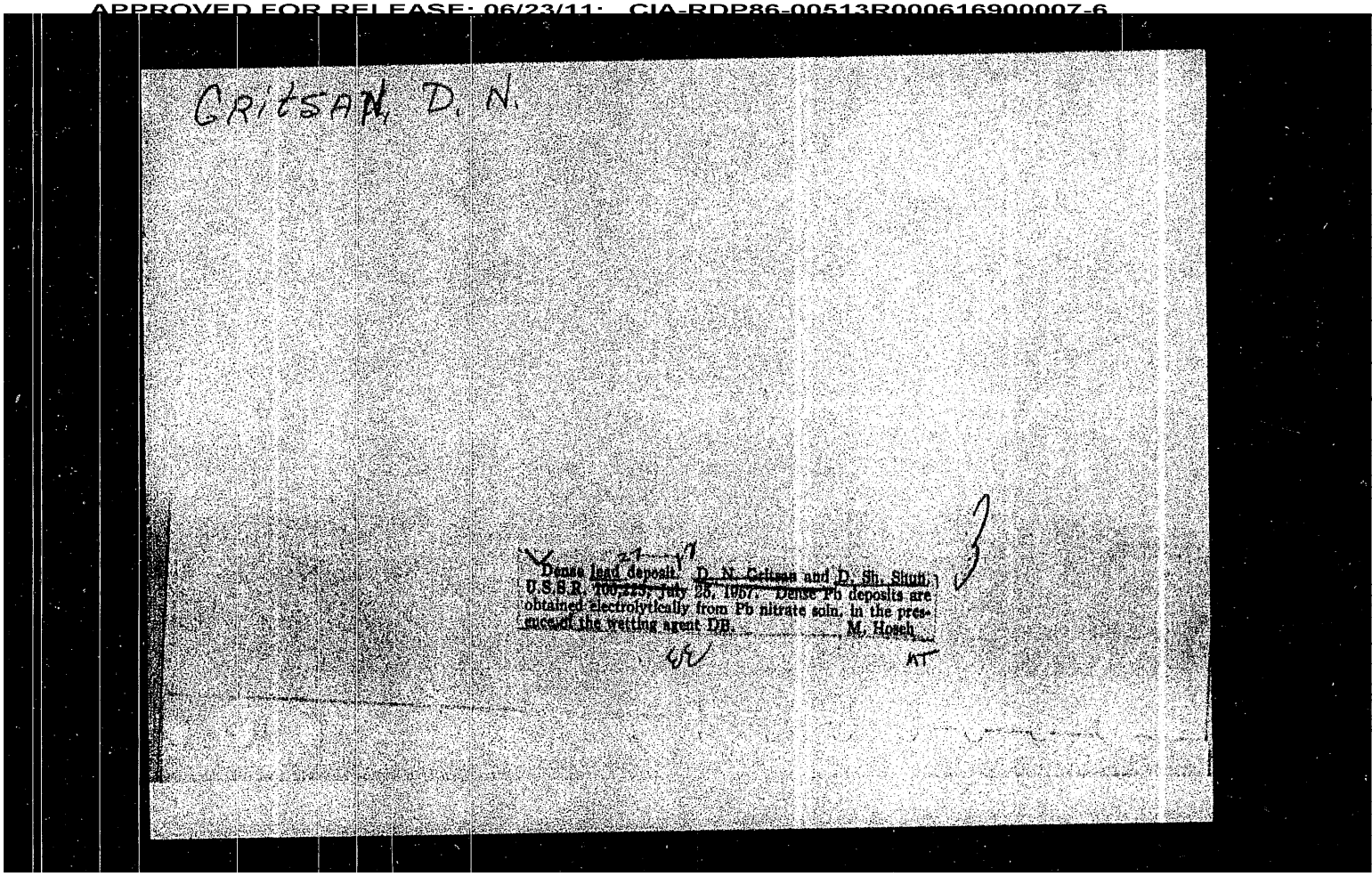
1/1



GRITSAN, D. N.

21-57

Dense lead deposit. D. N. Gritsan and D. Sh. Shuin. U.S.S.R. 200,225, July 26, 1967. Dense Pb deposits are obtained electrolytically from Pb nitrate soln. in the presence of the wetting agent DB. M. Hosch

GRITSAN, D.N.; SHUN, D.S.

Periodic variation of cathodic polarization on electrodeposition of lead in the presence of surface-active substances. Dokl.AN SSSR 106 no.6:1035-1038 F '56. (MLRA 9:7)

1.Khar'kovskiy gosudarstvennyy universitet imeni A.M.Gor'kogo. Predstavlena akademikom A.N.Frumkinym.
(Polarization (Electricity))(Lead plating)(Surface-active agents)

GRITSAN, D.N.; SHUN, D.S.; [illegible]; BULGAKOVA, [illegible]

Oscillographic investigation of cathodic polarization in connection with electrodeposition of metals at high current densities. Uch.zap. KHGU 71:64-75 '56. (MIRA 10:8)

(Electroplating) (Polarization (Electricity))

SOV/137-57-11-21173

The Oxidizability of Powder Cadmium Produced Electrolytically

Oxidation of Cd powders with rise in current density is fundamentally conditioned by increase in local temperature at the interface between the cathode and the solution. X-rays are used to show that electrical deposition of Cd in the presence of gelatin will yield unoxidized Cd powders.

N.P.

Card 2/2

SOV/137-57-11-21173

Translation from: Referativnyy zhurnal, Metallurgiya, 1957, Nr 11, p 77 (USSR)

AUTHORS: Gritsan, D.N., Bulgakova, A.M., Ovcharenko, N.N.

TITLE: The Oxidizability of Powder Cadmium Produced Electrolytically (Okislyayemost' poroshkoobraznogo kadmiya pri yego poluchenii elektroliticheskim putem)

PERIODICAL: Uch. zap. Khar'kovsk. un-t, 1956, Vol 15, pp 53-58

ABSTRACT: An investigation is made of the degree of oxidation of electrolytic powder Cd in accordance with the conditions of production (current density and bath composition) and of the possibility of reducing the reactivity of the powder by making use of the phenomena of passivation and protection from oxidation with the aid of organic additives at the moment the metal is deposited on the cathode, with simultaneous stabilization of its high degree of dispersion. The investigations are conducted with aqueous solutions of Cd sulfate and nitrate. It is established that the electrolytic Cd powders obtained from these solutions are highly disperse and highly oxidized, particularly if a nitrate bath is used, this being explained by the influence of the NO_3 ion. It is shown that the increase in the degree of

Card 1/2

Periodical : Dok. AN SSSR 100/6, 1111-1114, Feb 21, 1955

Card 2/2 Pub. 22 - 21/47

Abstract : The possibllity of applying a differential thermo-battery for measuring the temperature difference, for studying the connection between the temperature difference and cathode polarization and for establishing the quantitave relation between the temperature difference, current density and electrolyte concentration is discussed. Five USSR references (1952-and 1954). Table; graphs.

GRITSAN, D.N.

USSR/Chemistry - Electrodeposition

Card 1/2 Pub. 22 - 21/47

Authors : Gritsan, D. N.; and Bulgakova, A. M.

Title : Local cathode temperature during electrodeposition of metallic powders

Periodical : Dok. AN SSSR 100/6, 1111-1114, Feb 21, 1955

Abstract : It is shown that the electrodeposition of metallic powders is usually connected with the liberation of heat localized on the surface of the cathode. The liberated heat is characterized by the temperature difference existing between the surface of the cathode and the solution.

Institution : The A. M. Gorkiy State University, Kharkov

Presented by: Academician A. N. Frumkin, July 22, 1954

Gritsan D. N.

The chemical faculty of A. M. Gorkii State University of Kharkov, its pre-history, formation, and growth. E. S. Khotinskii, A. T. Davydov, V. F. Kornienko, I. Ya. Levitskii. *Uchenye Zapiski, Khar'kov. Gosudarst. Univ. im. A. M. Gor'kogo* 58; No. 13, 7-44(1955).—A history commemorating 150 yrs. of the university. Research Institute of Chemistry (Kharkov University). D. N. Gritsan. *Ibid.* 45-51.—Organization and history of the institute are discussed. Organic chemistry in Kharkov University from the day of its founding. E. S. Khotinskii and B. M. Krasovitskii. *Ibid.* 52-85.—A review (82 references) with particular prominence given to A. P. El'tekov's work on isomerization (1874-80), his studies on the hydrolysis of ethylene and propylene dibromides, the formation of 2-butene by reaction of CH_3CHS with Cu, and his priority in the study of the hydrogenation of MeC≡C-(MeCH) to yield isoheptane. History of analytical chemistry in Kharkov University. N. P. Komar'. *Ibid.* 87-112.—A review with 101 references. The growth of physical chemistry in Kharkov University during the 150 years of its existence. N. A. Izmailov. *Ibid.* 113-46.—This review (many references) gives considerable prominence to N. N. Beketov, to whom is ascribed priority in discovery of the aluminothermic reaction named for Goldschmidt. Colloid chemistry in Kharkov University. D. N. Gritsan, [illegible]. M. Simonova, and S. G. Teletov. *Ibid.* 147-61.—A review with extensive references. G. H. Fuchsman

GRITSAN, D. N.

"Periodic Phenomena During the Electrodeposition of Cadmium in the Presence of Alcohols. D. N. Gritsan, D. S. Shum, and B. M. Bulgakov (*Zhur. Fiz. Khim.*, 1950, 24, (6), 963-969).—[In Russian]. During the electrodeposition of Cd from $CdSO_4$ soln. contg. isoamyl and hexyl alcohol at a particular c.d. depending on the concentration of the electrolyte, spontaneous periodic changes of the cathode potential, c.d., and the character of the deposits are observed. At a cathode potential $\varphi_1 \geq 0.49$ V. bright deposits are produced. At $\varphi_2 = 0.68$ V. a dark, porous film is deposited. This deposition is intermittent. Increase in concentration of isoamyl alcohol to saturation causes irregularity of periodicity. Agitation of the soln. causes disappearance of these periodic phenomena, which re-appear ~30 sec. after agitation is stopped. This points to the diffusion-type character of the process. The phenomena are explained by the influence of colloids on the retardation of electrode polarization. Max. adsorption is exhibited only in the region of null-charge potential. 9 ref.—A. W.

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Khar'kov State U im Gor'kiy

GRITSAN, D. N.

USSR.

12144* - Influence of the Electrolyte Concentration on the Temperature Effect at the Cathode During the Electrolytic Deposition of Metallic Powders. **Vliianie kontsentratsii elektrolita na temperaturnyi effekt na katode pri elektroosazhdenii metallicheskikh poroshkov.** (Russian.) D. N. Gritsan and A. M. Bulgakova. *Zhurnal Fizicheskoi Khimii*, v. 29, no. 4, Apr. 1955, p. 649-652.

Empirical equations are developed for electrolytic production of Cd, Cu, and Zn powders. Graphs, table. 6 ref.

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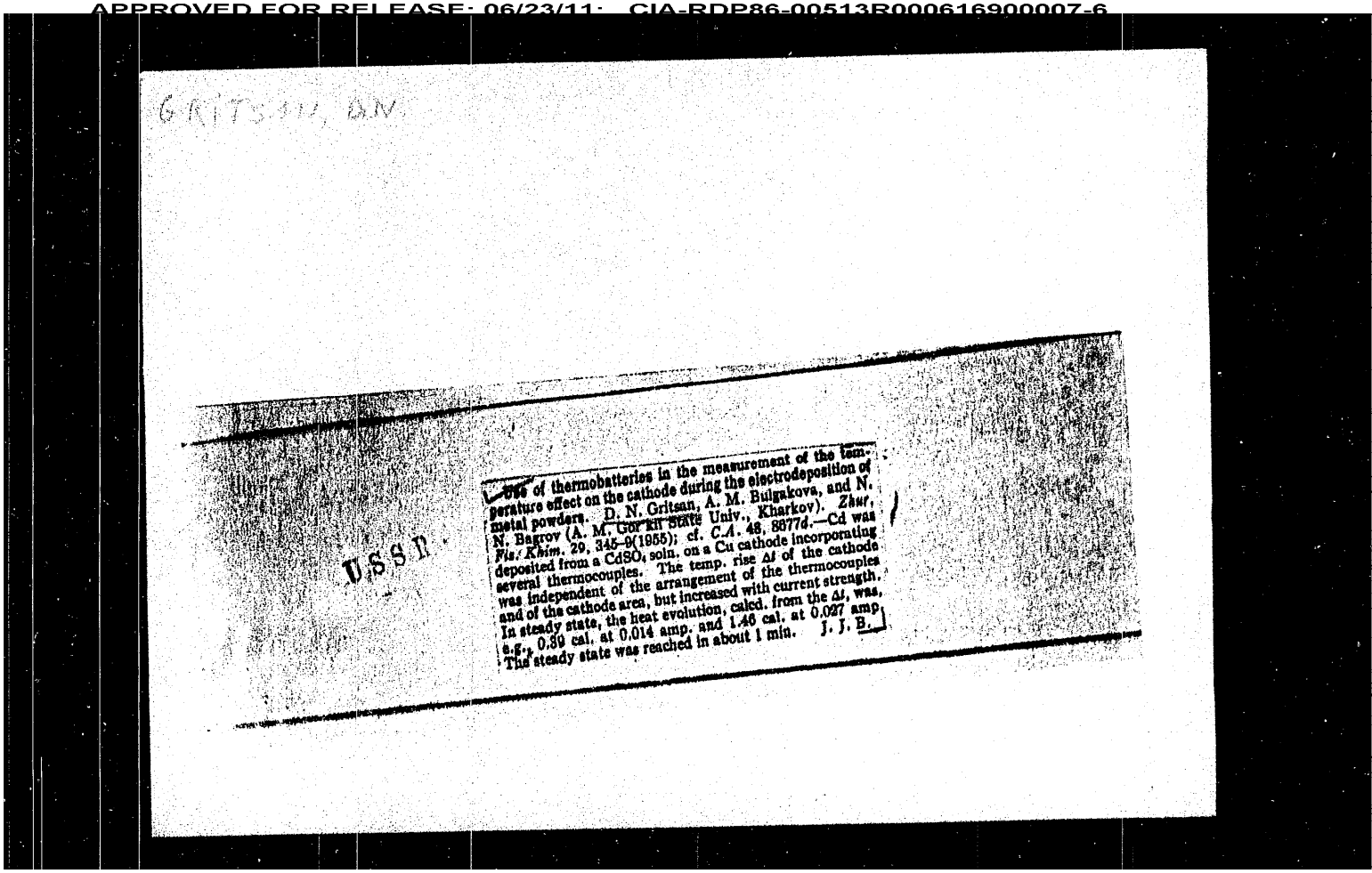
Gritsan, D.N.

"Cathodic Polarization and Temperature Effect at the Cathode During the Electrodeposition of Metal Powders." D. N. Gritsan and A. M. Bulgakova (*Zhur. Fiz. Khim.*, 1955, 29, (3), 540-544)—(In Russian). Cf. *ibid.*, (3), 546; *M.A.*, 24, 147. The temp. effect was studied further during the electrodeposition of Cd and Cu using differential thermocouples. By the oscillographic method G. and B. studied changes in potential of the cathode with time using various c.d. and concentrations of $CdSO_4$ and $CuSO_4$ electrolyte. The max. polarizations shown by the oscillograms correspond at a given time to the prodn. of a powdery deposit and the appearance of a temp. effect on the cathode. With the increase in temp. of the electrolyte, polarization and temp. effect (at const. c.d.) decreased linearly. A change in temp. Δt_c and polarization $\Delta\varphi_c$ at various concentrations and temp. of the electrolyte had the same character. This points to a connection between Δt_c and $\Delta\varphi_c$. When "neutral salt" KCl was added to $CdCl_2$ electrolyte Δt_c and $\Delta\varphi_c$ showed an increase. This indicates impoverishment of the cathode layer with the increase of the irreversibility of the process. The relation between the temp. effect and polarization may serve as the criterion for the measurement of the irreversibility of the electrolytic processes. 9 ref. See also *M.A.*, [illegible].—A. W.

"The Influence of Concentration of the Electrolyte on the Temperature Effect at the Cathode During the Electrodeposition of Metallic Powders." D. N. Gritsan and A. M. Bulgakova (*Zhur. Fiz. Khim.*, 1955, 29, (4), 640-652)—(In Russian). Cf. *ibid.*, (3), 540; preceding abstract. G. and B. found a quant. relationship between temp. effect Δt_c in °C, c.d. *i* in amp./dm.², and concentration *c* of the electrolyte in mole/l.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000616900007-6



GRITSAN, DN

USSR

Use of thermobatteries in the measurement of the temperature effect on the cathode during the electrodeposition of metal powders. D. N. Gritsan, A. M. Bulgakova, and N. N. Bagrov (A. M. Gorkii State Univ., Kharkov). *Zhur. Fiz. Khim.* 29, 345–9(1955); cf. *C.A.* 48, 8677*d*.—Cd was deposited from a $CdSO_4$ soln. on a Cu cathode incorporating several thermocouples. The temp. rise Δt of the cathode was independent of the arrangement of the thermocouples and of the cathode area, but increased with current strength. In steady state, the heat evolution, calcd. from the Δt, was, e.g., 0.39 cal. at 0.014 amp. and 1.46 cal. at 0.027 amp. The steady state was reached in about 1 min. J. J. B.

GRITSAN, D.M.; SHUN, D.S.

Periodic changes in cathode polarization during the electric plating of metals in the presence of surface-active substances. Dop. AN URSR no.1:92-95 '55. (MLRA 8:7)

1. Kharkivs'kiy derzhavniy universitet im. O.M. Gor'kogo. Predstaviv diysniy chlen AN URSR O.I. Brods'kiy. (Electroplating)
(Surface-active agents)

GRITSAN, D.N.

USSR/ Chemistry - Electrodeposition

Card 1/1 Pub. 147 - 21/27

Authors : Gritsan, D.N.; Bulgakova, A.M.; and Zolotareva, G.A.

Title : Effect of anions on the thermal characteristics of a cathode during electrodeposition of powdered metals

Periodical : Zhur. fiz. khim. 28/2, 337-344, Feb 1954

Abstract : It was established experimentally that the electrodeposition of powdered Cd, Zn and Cu is always accompanied by the origination of a certain thermal effect on the cathode. It was discovered that the magnitude of this thermal effect, for the above mentioned metals, depends upon the nature of the anions of the salts utilized for the electrolysis and that the magnitude increases with the increase in current density. The series of anions, which do affect the thermal effect of anions, are listed. The nature of the cation of the salt, and its effect on the thermal characteristics, are explained. Nine USSR references (1933-1954). Tables; graphs.

Institution : The A.M. Gorkiy State University, Kharkov

Submitted : May 12, 1953

GRITSAN, D.N.

USSR/Chemistry - Electrodeposition

Card 1/1 Pub. 147 - 10/27

Authors : Gritsan, D.N., and Bulgakova, A.M.

Title : Thermal effect on the cathode during electrodeposition of powdered Cd

Periodical : Zhur. fiz. khim. 28/2, 258-264, Feb 1954

Abstract : It was established that electrodeposition of dispersion Cd deposits is accompanied by the origination of a thermal effect on the cathode. The thermal effect on the cathode can be measured by means of a thermometer with methylated receptacle. The relation between thermal effects, during electrodeposition of powdered Cd and the electrolyte concentration and current density, was established. The origination of the thermal effect is not due to the increase in ohmic resistance in the near-cathode layer of the electrolyte. The introduction of a neutral salt was found to reduce the current den. ty due to which the dispersion residue is formed thus resulting in the thermal effect. Nine USSR references (1941-1952). Table; graphs.

Institution : The A.M. Gorkiy State University, Kharkov

Submitted : April 20, 1953

GRITSAN, D.N.

Electrolytic production of a manganese-cobalt alloy. D. N. Gritsan, B. I. Vail, and V. P. Moskovets. *Uchenye Zapiski Khar'kov. Univ.* 50, *Trudy Nauch.-Issledovatel. Inst. Khim. Fakul'teta* No. 11, 273-5(1954); *Referat. Zhur., Khim.* 1955, No. 9946.—Satisfactory deposits of Mn-Co were obtained from solns. of which the catholyte had the compn. $MnSO_4.5H_2O$ 180, NH_4SCN 10, $(NH_4)_2SO_4$ 130, and the anolyte contained $CoSO_4.7H_2O$ 90 g. per l. The cathodic c.d. was 20 amp. per sq. dm., the temp. 18–20°, and the pH approx. 1. The pH was adjusted by the addn. of dil. H_2SO_4. Graphite or Pb was used as anodes. The electrolysis was carried out with a diaphragm made as a cylinder of sheet asbestos or as a sack of belting. Without the diaphragm the alloy was not deposited. In the absence of $(NH_4)_2SO_4$ or NH_4SCN the Mn-Co deposits were of unsatisfactory quality. When the directions were followed, the deposits were bright, shiny, and adhered well to Cu, Fe, and Pt. The Mn content in the deposits could be brought up to 40%. The quantity of Mn was controlled by the c.d. and the pH of the catholyte. Lowering the c.d. and raising the pH of the catholyte reduced the amt. of Mn in the deposit. The appearance of specimens coated with this alloy did not change during 3 months of storage. A coating with this alloy contg. 20% Mn lost 0.3% per day when kept in 0.2N H_2SO_4.

M. Hosch

GRITSAN, D. N. Aug 52

USSR/Chemistry - Cadmium

"Periodic Phenomena during the Electrodeposition of Cadmium in the Presence of Impurities," D. N. Gritsan and N. S. Tsvetkov, Khar'kov State U

Zhur Fiz Khim, Vol 26, No. 8, pp 1110-1116

During the electrodeposition of Cd from simple salt solns contg dextrin or some other org colloidal and surface-active substance, a spontaneous periodic change in the cathode potential takes place, accompanied by changes in the strength of the circuit's current and the structure of the deposit. When spontaneous periodic oscillation of the cathode potential takes place, there is a reduction of Cd ions at 2 greatly differing cathode potentials corresponding to 2 sharply different conditions of the cathode surface. A dense, lustrous Cd deposit forms at less negative potentials, whereas a loose, dark deposit forms at more negative potentials. The periodic oscillation of the cathode potential, and the whole aggregate of influences associated with it, takes place at a specific cd. It is surmised that the periodic, spontaneous oscillations of potential are caused by adsorption of impurities forming a dense adsorption film on the surface of the cathode. The firm then periodically desorbs at sufficiently negative electrode potentials.

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GRITSAN, D.N.; KUCHER, R.V.; YURZHENKO, R.M.

Dispersed electrolytic depositions of bismuth. Nauk.zap.L'viv.un. 21:63-69 '52. (MLRA 10:7)

1. Kafedra fizicheskoy i kolloidnoy khimii.
(Bismuth) (Electroplating)

6

M

***Conditions for the Electrodeposition of the Alloy Mn Ni.** D. N. Gritsan and N. S. Tsvetkov (*Zhur. Priklad. Khim.*, 1949, **22**, (6), 600–604). [In Russian]. Preliminary experi- ments established that unless NH_4^+ ions are present it is impossible to obtain satisfactory Mn–Ni deposits. A bath contg. Mn, Ni, and NH_4 sulphates was therefore used, with a brass (in some experiments, Cu or Fe) cathode (working area 35 cm.²) and two graphite anodes, the bath temp. being 20° C. After electrolysis the cathode was washed, dried, and the deposit dissolved in a mixture of H_2SO_4 (1 : 20) 320, HNO_3 (1 : 4) 100, H_3PO_4 (21%) 50 ml. Mn was determined in this soln. by a persulphate nitrite method; the Ni content of the deposit was calculated by difference. With baths contg. $MnSO_4.5H_2O$ 50–300, $NiSO_4.7H_2O$ 40, $(NH_4)_2SO_4$ 75 g./l., and cathodic c.d. (D_k) = 2·8 amp./dm.², the Mn content of the deposit rose sharply to ~7% at 150 g./l. $MnSO_4.5H_2O$, but remained const. at higher $MnSO_4$ con- centrations; the coatings were mirror-bright and possessed high chem. stability. With $MnSO_4.5H_2O$ 150, $NiSO_4.7H_2O$ 10 g./l., and D_k = 2·8 amp./dm.², the Mn content of the deposit fell from 15 to 9% as the $(NH_4)_2SO_4$ compn. of the bath rose from 20 to 75 g./l., the quality of the deposits being best at 60–75 g./l. Variation in D_k from 2·7 to 17·0 amp./dm.² with this type of bath had little effect on the Mn content of the deposits, which were dense and bright; above 17·0 amp./dm.² the deposits were dark. A five-fold lowering of the Ni concentration in the bath resulted in only a 2% increase in the Mn content of the deposit. Further experi- ments were made using a diaphragm cell, the catholyte contg. $MnSO_4.5H_2O$ 150, $(NH_4)_2SO_4$ 75 g./l., and the anolyte $NiSO_4.(NH_4)_2SO_4.7H_2O$ saturated, $(NH_4)_2SO_4$ 75 g./l. For each value of D_k there is a definite catholyte pH at which there is a sudden jump in the Mn content of the deposit; with an increase in D_k, the jump in the %Mn–pH curve shifts into the more acid region. Thus at 5·4 amp./dm.², there is a jump from 15 to 87% Mn at a catholyte pH = ~8; at 10·8 amp./dm.², from 32 to 98% Mn at a pH = ~5. This rise is accompanied by a rise in the cathodic potential (ϕ)/pH curve. Deposits with <35% Mn were only slightly less resistant to corrosion than those of Ni; deposits with >35% Mn quickly lost their lustre, but were more resistant than those of pure electrolytic Mn. Treatment of Mn-rich deposits with 5% $K_2Cr_2O_7$ soln. preserved their lustre and increased their corrosion-resistance.—G. V. E. T.

Lab Phys Chem, L'vov State Univ. I. Franko

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

GRITSAN, D.N.; TSVETKOV, N.S.

Conditions of simultaneous electroplating of manganese and chromium. Nauk. zap. L'viv. un. 13:77-82 '49. (MIRA 12:10)

1.Kafedra fizicheskoy i kolloidnoy khimii L'vovskogo gosudarstvennogo universiteta imeni I. Franko.
(Electroplating)

GRITSAN, D.M.

Dissemination ability of stannate electrolytes. Nauk.zap.L'viv.un.
9:103-108 '48. (MLRA 10:5)

1.Kafedra fizicheskoy i kolloidnoy khimii.
(Stannates) (Electrolytes)

GNITSAK, Z.I.

Cup plant. Zemledelie 27 no.3:80-82 Mr '65.
(MIRA 18:1)

GRITSAK, Z.I.

Cup plant as a promising silage crop for Bukovina. Past. i sen. (MIRA 18:6)
1 no.1:118-122 '65.

1. Botanicheskiy institut im. V.L. Komarova AN SSSR, Leningrad, i Chernovitskaya gosudarstvennaya sel'skokhozyaystvennaya opytnaya stantsiya.

GRITSAK, L. F.

Fritsak. L. F. "Significance of perifocal leucocytosis during surgical infection," Trudy Kuybysnevsk. gos. med. in-ta, Vol. 1, 1948, p. 162-70

SO: U-2888, Letopis Zhurnal'nykh Statey, No. 1, 1949

ACC NR: AP7001936

the power tube cathode and ground. The described circuit was tested using a GK-5A power tube operating at 6.3 Mc in pulsed mode. The output pulse had a power of 3 Mw. Its duration and repetition frequency were 1 msec and 12 cps, respectively. It is claimed that the efficiency of this circuit is 60% greater than that of the simple common grid circuit. Orig. art. has: 4 figures and 2 formulas.

SUB CODE: 20/ SUBM DATE: 02Dec65/ ORIG REF: 002/ ATD PRESS: 5111

Card 2/2

ACC NR: AP7001936 SOURCE CODE: UR/0120/66/000/006/0039/0040

AUTHOR: Grits, Yu. A.; Panasyuk, V. S.; Ostreyko, G. N.; Yudin, L. I.

ORG: Institute of Nuclear Physics, SO AN SSSR, Novosibirsk (Institut yadernoy fiziki, SO AN SSSR)

TITLE: High-frequency power stage excitation circuit for feeding cyclic and linear accelerator resonators

SOURCE: Pribory i tekhnika eksperimenta, no. 6, 1966, 39-40

TOPIC TAGS: cyclic accelerator, linear accelerator, particle accelerator component

ABSTRACT:

In high-power common-grid pulse amplifiers for cyclic or linear accelerators, low efficiency and pulse distortion result from a mismatch between the driver and the power tubes where the second harmonic is undesirable An excitation circuit is presented in which the fundamental and the second harmonics follow different paths at the power tube cathode input circuit. The interstage circuit between the driver and the power tube consists of a tuned split LC circuit (tuned to the fundamental frequency), two parallel cable sections assuring a high travelling wave ratio for the fundamental and a high impedance for the second harmonic (cable length is such that it acts as a quarter-wave cable for the second harmonic). The second harmonic is further trapped by LC circuits between

Card 1/2 UDC: 621.3.084.872:621.384.61;621.384.62

L 4238-66
ACCESSION NR: AT5007980

4

Yu. Sh. Venediktov, V. N. Rybin, G. M. Sigidin). Orig. art. has: 3 figures.

ASSOCIATION: Institut yadernoy fiziki SO AN SSSR (Nuclear Physics Institute, SO AN SSSR)

SUBMITTED: 26May64 ENCL: 00 SUB CODE: NP

NO REF SOV: 003 OTHER: 000

Card 4/4

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000616900007-6

injectors of such type simpler to design and construct with the object of ensuring the initial cycle of work on the construction of an accelerator. In a short time the mentioned Nuclear Physics Institute prepared an injector using a long coaxial line as the resonant circuit. With the help of this injector, work was begun on the investigation of the electron-optical properties of the accelerator and channelizing structure. After about one year this injector was replaced by a more effective one, the so-called small spiral injector, which was made in the mentioned Physicotechnical Institute of the Academy of Sciences Georgian SSR. Still unbuilt is the ultimate injector with electron energy of 3.5 Mev and current around 100 amperes. The work on the injector described in the present report was carried out by A. A. Naumov. It is discussed under the topics: block scheme (self-excited generator of sub-excitation, high-frequency generator, resonant injector circuit, pulse modulator, electron beam modulator, fixation of high-frequency phase, starting accelerator pulses); design and construction; electron guns; radio-engineering devices; measurement of the parameters. In the development of the different components of the injectors mentioned in this report a number of associates took part in the work: at the Nuclear Physics Institute, SO AN SSSR (V. A. Borisov, I. A. Samokhin, V. G. Gindenko, A. P. Afonin, A. V. Makiyenko, V. P. Alekseyev, L. I. Kol'chenko) and the Physicotechnical Institute, Academy of Sciences Georgian SSR (V. I. Vishnevskiy, Ya. R. Abas-Ogly, V. Ye. Zelenin, M. I. Matrosov,

L 4238-66

ACCESSION NR: AT5007980

such high beam power, the electric field realizes energy that is accumulated over a period of time much larger than the duration of the electron pulse. G. I. Budker and A. A. Naumov have proposed several types of accelerators which are based on this principle, which are being developed in part at the Nuclear Physics Institute, SO AN SSSR. The necessity for the rapid construction of an injector of such a type prompted the utilization of the mentioned principle, in which a radio-engineering resonant circuit serves to store the electric field energy. A similar accelerator was proposed and described by a group of authors (Tolok, V. T.; Bolotin, A. I., et al. *Atomnaya energiya* 11, 41 (1961)). In order to increase the duration of the pulse of accelerated particle current for arbitrary rigid requirements on the homogeneity of the electrons relative to energy, it was required to greatly lower the frequency of the high-frequency voltage in comparison with the case discussed in the last mentioned work (Tolok, V. T., et al.). The development of a 3.5-Mev injector and current around 100 amperes was undertaken at the Physico-technical Institute, Academy of Sciences Georgian SSR, where a group of associates had proposed the design and construction of an injector forming the basis of the present development. Later, because of causes not in the control of the developers, the preparation of the injector began to fall considerably behind that of the accelerator itself. This forced a search for the possibility of producing

Card 2/4

L 4238-66 EWT(m)/EPA(w)-2/EWA(m)-2 IJP(c) GS

ACCESSION NR: AT5007980 S/0000/64/000/000/1080/1084 44 28 B+1

AUTHOR: Grits, Yu. A.; Iremashvili, D. V.; Naumov, A. A.; Pyatnitskiy, A. P.; Chernov, A. A.; Yudin, L. I.; Yasnov, G. I.; Panasyuk, V. S.; Ostreyko, G. N. 19

TITLE: Strong-current high-frequency pulse accelerators for one-revolution injection into a synchrotron

SOURCE: International Conference on High Energy Accelerators. Dubna, 1963. Trudy. Moscow, Atomizdat, 1964, 1080-1084

TOPIC TAGS: high energy accelerator, synchrotron, electron accelerator

ABSTRACT: Plans were begun in 1959 for the strong-current synchrotron B-3M with external injection of the electrons (Budker, G. I.; Naumov, A. A., et al., present collection, p. 1065). For this there was required an injector of electrons at currents of several tens of amperes and energy not less than 1 Mev. The time duration of the injected bunch of electrons (current pulse) must be sufficient for filling the chamber of the synchrotron, which amounts to about 20 nanoseconds in the case of equilibrium orbit length of 700 cm and relativistic electrons. The deviation from the mean energy of the electrons in a bunch must not exceed ±0.5%. The beam pulse power of the injector amounts to tens of megawatts. In order to obtain

Card 1/4

VISHNEVSKIY, V.I.; GRITS, Yu.A.

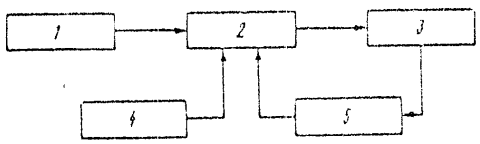
Controllable resistor substitutes. Prib. i tekh. eksp. 8 no.3: 180-181 My-Je '63. (MIRA 16:9)

1. Fiziko-tekhnicheskiy institut AN GruzSSR.
(Electric resistors)

VLASENKO, V.P.; GRITS, Yu.A.; KHULELIDZE, D.Ye.; CHULIUS, V.F.

[Total cross sections of fast neutron scattering by argon and krypton] Polnye secheniia rasseianiia bystrykh neitronov argonom i kriptonom. Moskva, Glav. upr. po ispol'zovaniiu atomnoi energii, 1960. 7 p.
(MIRA 17:1)

ACC NR: AT7004005



Hf energy stored in a 6.4-Mc resonator is used for particle acceleration. Modulator 1 (see figure) supplies voltage pulses to two-stage generator 2 anodes; feedback is effected via high-Q load 3; adjustable coaxial line 5 is employed for selecting the feedback phase. A low-power oscillator 4 is intended for overcoming the resonator multipactor. A power of 8 Mw was obtained from the generator, with 25-kv anode pulses, during tests. However, in the above high-Q-load-excitation scheme, the generator develops 3.6 Mv at 16 kv. "The authors wish to thank A. A. Naumov for organizing this project, and V. I. Vishnevskiy, N. P. Rubinshteyn, and Ye. P. Mel'nikov for their participation in the alignment of the equipment." Orig. art. has: 2 figures.

SUB CODE: 09 / SUBM DATE: 06Mar66 / ORIG REF: 003

ACC NR: AT7004005 SOURCE CODE: UR/0000/66/000/000/0287/0290

AUTHOR: Grits, Yu. A.; Ostreyko, G. N.; Panasyuk, V. S.; Yudin, L. I.

ORG: Institute of Nuclear Physics, SO AN SSSR (Institut yadernoy fiziki SO AN SSSR); Physico-Technical Institute, GKAE SSSR (Fiziko-tekhnicheskiy institut GKAE SSSR)

TITLE: High-frequency pulse generator with 8-Mw pulses intended for a high-power electron accelerator

SOURCE: Mezhvuzovskaya konferentsiya po elektronnym uskoritelyam. 5th, Tomsk, 1964. Elektronnyye uskoriteli (Electron accelerators); trudy konferentsii. Moscow, Atomizdat, 1966, 287-290

TOPIC TAGS: pulse generator, electron accelerator

ABSTRACT: A linear accelerator with a 40-amp, 1.3-Mev, ±0.5%-spread, 7-nsec pulse was developed and built in the Physico-Technical Institute, GKIAE SSSR. It was put into operation in the Institute of Nuclear Physics, SO AN SSSR, and has been used there for a single-circle injection into an electron synchrotron.

Card 1/2

Total cross sections of fast...

every 30 - 40 min, with crypton every 60 - 90 min. Density of argon was 1.4 g/cm^3, of crypton 2.6 g/cm^3. The total neutron scattering cross sections in the energy range investigated were 3.0 ± 0.5 barns for argon and 5.5 ± 0.5 barns for crypton. There are 2 figures and 5 non-Soviet references. The four references to English-language publications read as follows: Day R. B., Henkel R. L., Phys. Rev., 92, 548 (1953); Sherwood J. E., Goodman C. Phys. Rev., 92, 523 (1953); Nereson N., Darden S. Phys. Rev., 94, 1678 (1954); Rose M. E., Shapiro M. M. Phys. Rev., 74, 1853 (1948).

Legend to Fig. 1. О - window, Д - measuring dewar, glass, ИЦ - test cylinder with axis О, Г - neck, К - condenser, К - three-way cock, V - valve, Б - steel gas cylinder, С - dewar with liquid nitrogen; M1 - pressure gage, 0 - 5 atm; M2 - pressure gage, 0 - 150 atm; (1) to gas cylinder; (2) to vacuum forepump.

Card 2/[illegible]

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B108/B102

26.2245

AUTHORS: Vlasenko, V. P., Grits, Yu. A., Khulelidze, D. Ye., Chulkus, V. F.

TITLE: Total cross sections of fast neutron scattering from argon and crypton

SOURCE: Krupchitskiy, P. A., ed. Neytronnaya fizika; sbornik statey. Moscow, 1961, 283 - 286

TEXT: The total scattering cross sections of neutrons with 2.13 - 2.34 Mev from D(d,n) reactions were measured with the arrangement shown in Fig. 1. The measurements can be made with liquid gas. The device is free from many shortcomings attached to similar apparatus. After evacuation of the system, the gas is condensed and led into the test cylinder under a pressure of 2 - 3 atm (to reduce evaporation). The gas cylinder B is placed into the dewar C with liquid nitrogen. The gas evaporating from the test cylinder is led back into the gas cylinder B through a rubber cooling spiral and condensed in the cylinder B. For refilling, the test vessel is placed in the dewar. Refilling with argon was necessary once

Card 1/1 2

GRITS, L.M.; KEDENKO, V.S.; SOBOL', V.N.

Rapid method of analyzing the batch. Stek.i ker. 19 no.12:24-25 D '62. (MIRA 16:1)

1. Stekol'nyy zavod "Proletariy".
(Glass—Analysis)

GRITS, L.M.; KEDENKO, V.S.

Simplified method of qualitative testing of sand for cobalt.
Stek. i ker. 19 no.6:31 Je '62. (MIRA 15:7)

1. Stekol'nyy zavod "Proletariy".
(Cobalt) (Sand, Glass--Testing)

4-4-3/22

SUBJECT: USSR/Bibliography

AUTHOR: Vzorov, M., Gurevich, N., Tolin, V., Gritchuk, A.

TITLE: New Publications (Vyshli iz pechati)

PERIODICAL: Znaniye - Sila, April 1957, #4, pp 3-4 (USSR)

ABSTRACT: The four authors review 4 books all dealing with reminiscences of Lenin. The author of the first book "Reminiscences of V.I. Lenin" is not indicated. A. Bezymenskiy is the author of the second book entitled "Encounters of Komsomol'tsy with V.I. Lenin" (Vstrechi komsomol'tsev s V.I. Leninym). The third book is written by V. Bonch-Bruyevich "V.I. Lenin in Petrograd and Moskva (1917-1920)" and the fourth one "Lenin's Youth" by N. Nechvolodova and L. Reznichenko.
The article contains 4 photos of the book covers.

ASSOCIATION: -

PRESENTED BY: -

SUBMITTED: -

AVAILABLE: Library of Congress

Card 1/1

GRITCHUK, A.

"Beginning of the way" ("Lenin's youth" by M.Nechvolodova, L.Reznichenko. Reviewed by A.Gritchuk). Znam.sila 32 no.4:4 Ap '57. (MIRA 10:7)

(Lenin, Vladimir Il'ich, 1870-1924).
(Nechvolodova, N.) (Reznichenko, L.)

GRITCHIN, V.V., [illegible]

Device for cleaning wire insulation. Prom. energ. 18 no.11:20-21 N '63. (MIRA 17:12)

SASS-TISOVSKAYA, T A.; GRITCHIN, V.V.

Die for bending double pipe elbow. Mashinostroitel' no.3:24 Mr '64. (MIRA 17:4)

MAYDEL', M.B.; GRITCHIN, V.V.; SMIRNOV, V.F.

Electrochemical painting of steel components. Energ. i elektrotekh. prom. no.3:37 Jl-S '63. (MIRA 16:10)

[redacted], V. V.

Making die-casting molds by means of electroplating. Mashinostroitel' no.12:34 D '62. (MIRA 16:1)

(Plastics—Molding)

GRITCHIN, P.A.

Scale of trade activities is growing. Vnesh.torg. 28 no.11: 59-60 '58. (MIRA 11:12)

1. Predsedatel' B/O "Avtoeksport."
(Motor vehicles) (Russia--Commerce) (Tractor)

GRITCHIN, N.F., general-leytenant

Skill and courage of the defenders of Moscow. Vest. protivovozd. obor. no.7:73-75 Jl '61. (MIRA 14:8)
(Moscow, Battle of, 1941-1942)

GRITCHIN, N.

USSR/ Miscellaneous - Radio-amateurism

Card 1/1 Pub. 89 - 1/28

Authors : Gritchin, N., Chairman of the Central Committee of the All Union Voluntary Association for the Armed Forces.

Title : Mass radio amateurism

Periodical : Radio 1, 1-3, Jan 1954

Abstract : Spreading the idea of radio amateurism among the people is suggested. Special attention paid by the Sov. Gov. and the Com. party to the idea of radio amateurism as to the best means for propaganda and communications is pointed out.

Institution: .....

Submitted: .....